

CLAIMS

1.

A signal-coding unit, to be used with a radio receiver compatible with the RDS standard, receiving as input an input signal according to the RDS standard comprising not-indicative information about said radio receiver, and emitting as output an output signal,
5 characterized in that it comprises signal-combining means for combining at least one portion of said input signal with a signal component comprising indicative information about said radio receiver, the combination between at least one portion of said input signal and said signal component being said output signal.

10 2.

15 The signal-coding unit according to claim 1,
characterized in that said output signal comprises:

- a first output signal component (CT), apt to represent current data and current time;
- a second output signal component (PRIC), comprising indicative information about said radio receiver;
- a third output signal component (PS), comprising indicative information about a source transmission station of said input signal; and
- a fourth output signal component (PI), comprising indicative information about a piece transmitted by said source transmission station and received by said radio receiver.

20 3.

25 The coding unit according to claim 1 or 2,
characterized in that said second output signal component (PRIC) comprises one or more data blocks, each of said blocks being constituted by a bit sequence apt to represent a portion of said indicative information about said radio receiver.

30 4.

35 The coding unit according to any of the preceding claims,
characterized in that said output signal comprises a

fifth output signal component (DBF), comprising indicative information about a list of preferred pieces.

5.

A transmitter-receiver apparatus comprising:

- 5 - a radio receiver (1) compatible with the RDS standard, apt to receive a signal according to the RDS standard;
- a signal-coding unit (9) according to any of the claims 1 to 3, connected to said radio receiver; and
- a transmission unit (10), connected to said signal coding unit, apt to transmit the output signal emitted 10 as output by said signal coding unit.

6.

The transmitter-receiver apparatus according to claim 5, characterized in that said radio receiver includes a piece-searching system, which comprises:

- a first tuner (11) to select and receive a first frequency;
- a memory unit (12) to store RDS data;
- a second tuner (13) to select, while receiving said first frequency, a second frequency different from the first frequency and not belonging to the AF list of the frequencies alternative to the first frequency; and
- a switching device (14) apt to control the reception switching between the first and second tuner after comparing RDS data related to said second frequency 20 with the RDS data stored in the memory unit.

7.

The transmitter-receiver apparatus according to claim 5 or 6,

characterized in that said transmission unit adopts a GSM-type data transmission standard.

8.

A signal-decoding unit, to be used in a system for receiving radio-transmitted data, receiving as input an input signal comprising indicative information about a

transmitter-receiver apparatus therefrom said input signal is transmitted,

characterized in that it comprises signal-separating means for separating from said input signal said indicative information about said transmitter-receiver apparatus.

9.

The signal-decoding unit according to claim 8, characterized in that said input signal comprises:

- a first input signal component (CT), comprising indicative information about transmission date and time of said input signal;

- a second input signal component (PRIC), comprising said indicative information about said radio transmitter therefrom said input signal is transmitted;

- a third input signal component (PS), comprising indicative information about a source transmission station of said input signal; and

- a fourth input signal component (PI), comprising indicative information about an excerpt transmitted by said source transmission station.

10.

The signal-decoding unit according to claim 8 or 9,

characterized in that said second input signal component (PRIC) comprises one or more data blocks, each of said block being constituted by a bit sequence apt to represent a portion of said indicative information about said radio transmitter therefrom said input signal is transmitted.

11.

The signal-decoding unit according to any of the claims 8 to 10,

characterized in that said input signal comprises a fifth input signal component (DBF), comprising indicative information about a list of preferred pieces.

12.

A system for receiving radio-transmitted data comprising:

- a receiving unit (20) apt to receive a signal coming from at least one of said radio receivers;
- a signal-decoding unit (21) according to any of the 5 claims 7 to 9, connected to said receiving unit;
- a control unit (22), connected to said signal-decoding unit, apt to control capturing, storing, processing and monitoring of signals coming from said signal-decoding unit;
- 10 - a storing unit (25), connected to said control unit, apt to store data coming from said control unit; and
- a processing unit (24), connected to said control unit, apt to perform statistical-type calculations on data sent by said control unit.

15 13.

The data-receiving system according to claim 12, characterized in that said receiving unit adopts a data-receiving GSM-type standard.

14.

20 The data-receiving system according to claim 12 or 13, characterized in that said statistical-type calculations on data provided by said control unit are performed in real time by said processing unit.

15.

25 The data-receiving system according to any of the claims 12 to 14, characterized in that said statistical-type calculations on data provided by said control unit are performed in historical mode by said processing unit.